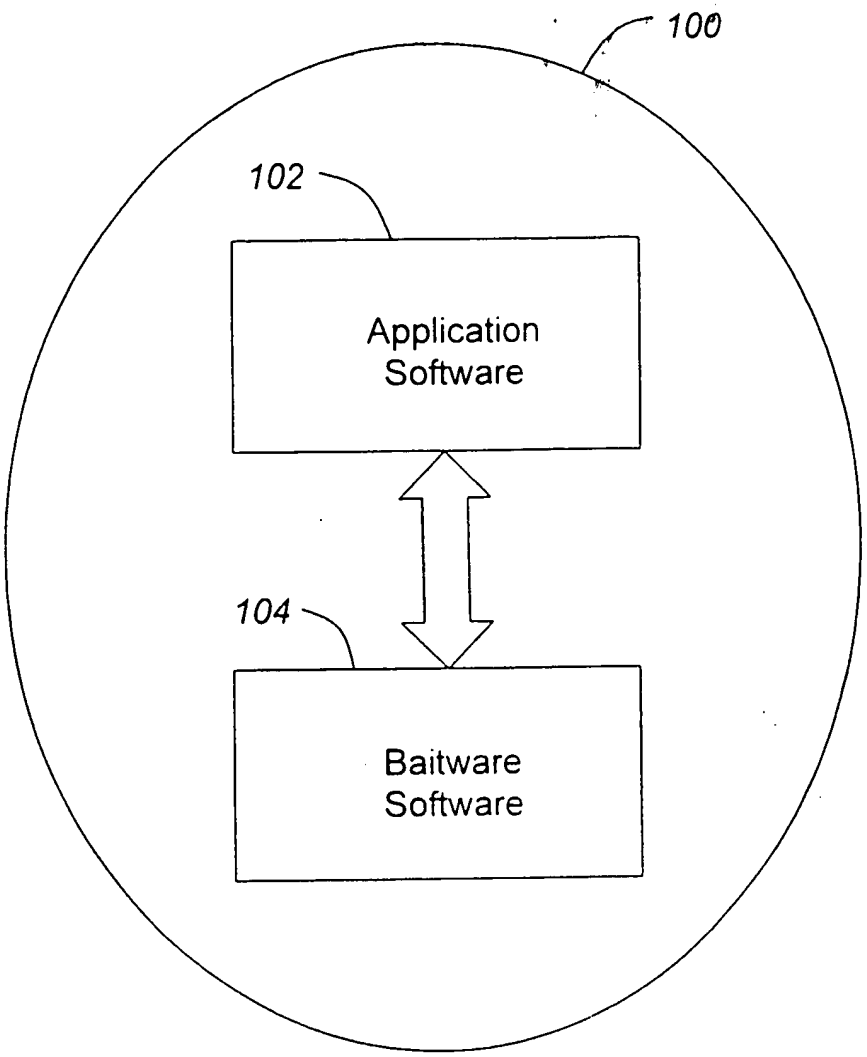


FIG. 1

TRANSLATION COPY

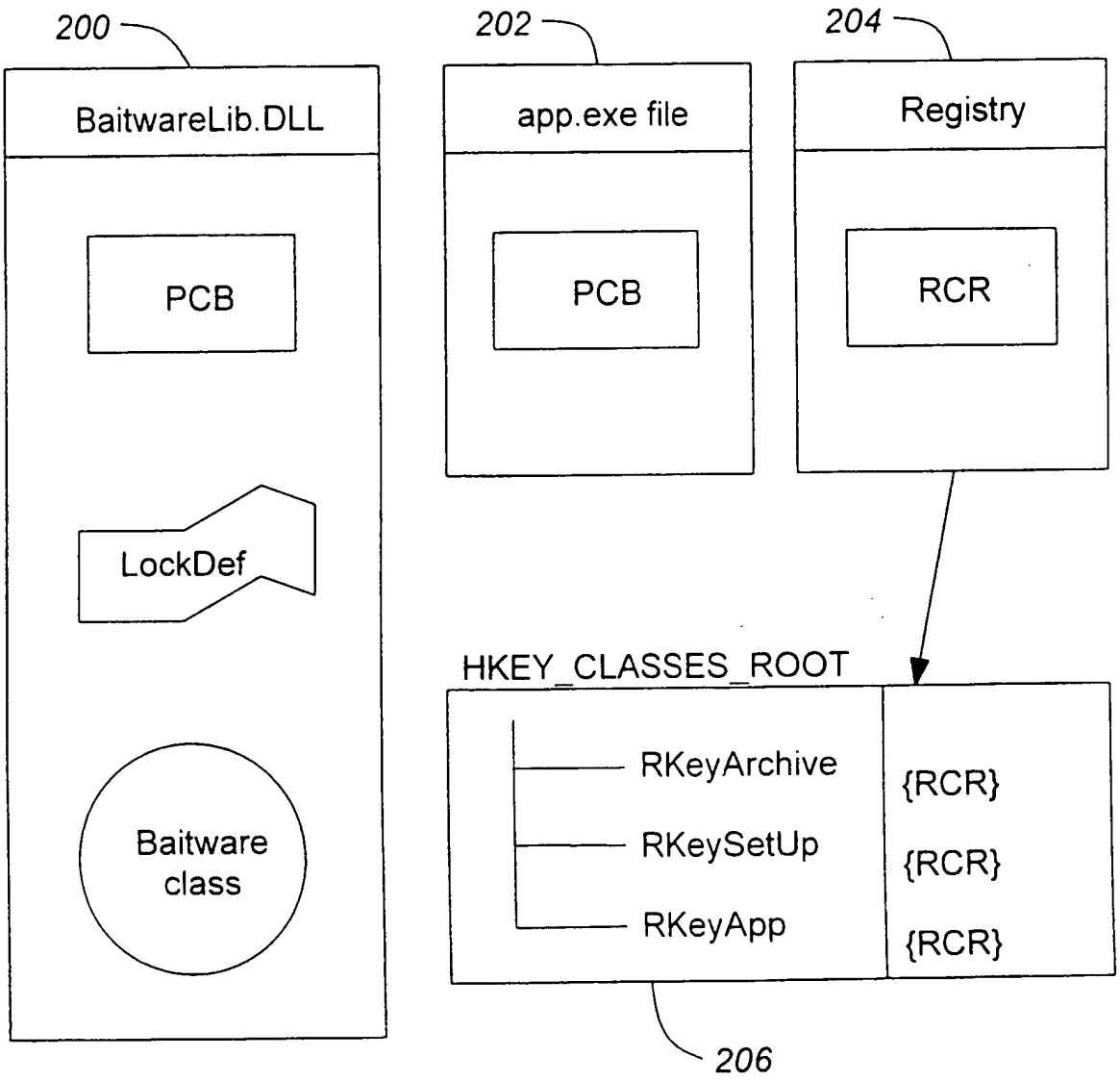
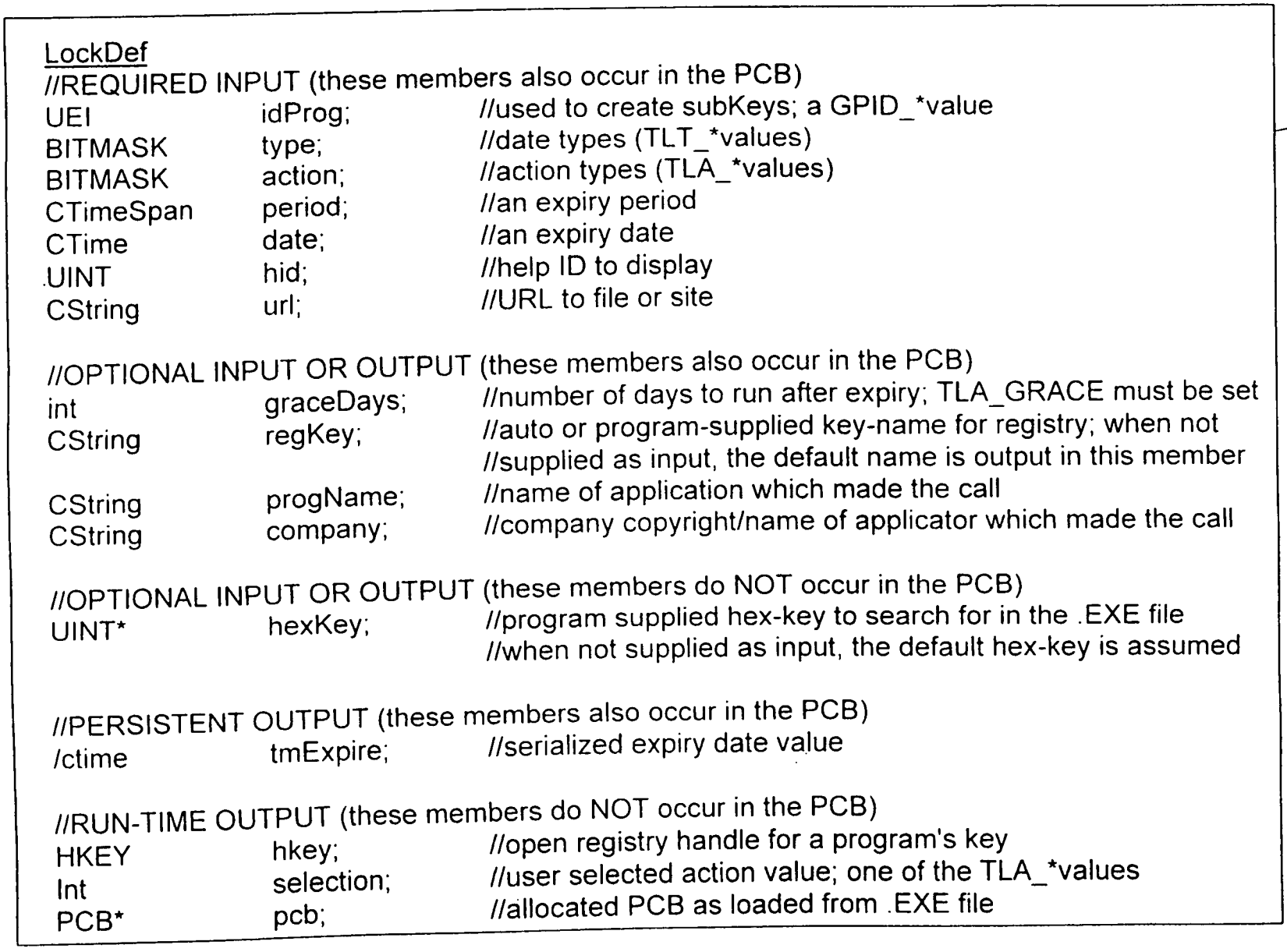

200
BaitwareLib.DLL
PCB
LockDef
Baitware class
202
app.exe file
PCB
204
Registry
RCR
HKEY_CLASSES_ROOT
RKeyArchive
RKeySetUp
RKeyApp
{RCR}
{RCR}
{RCR}
206

FIG. 2

T092TT'Z566TZ60



```
LockDef
//REQUIRED INPUT (these members also occur in the PCB)
UEI             idProg;         //used to create subKeys; a GPID_*value
BITMASK         type;           //date types (TLT_*values)
BITMASK         action;         //action types (TLA_*values)
CTimeSpan       period;         //an expiry period
CTime           date;           //an expiry date
UINT            hid;            //help ID to display
CString         url;            //URL to file or site

//OPTIONAL INPUT OR OUTPUT (these members also occur in the PCB)
int             graceDays;      //number of days to run after expiry; TLA_GRACE must be set
CString         regKey;         //auto or program-supplied key-name for registry; when not
                                //supplied as input, the default name is output in this member
CString         progName;       //name of application which made the call
CString         company;        //company copyright/name of applicator which made the call

//OPTIONAL INPUT OR OUTPUT (these members do NOT occur in the PCB)
UINT*           hexKey;         //program supplied hex-key to search for in the .EXE file
                                //when not supplied as input, the default hex-key is assumed

//PERSISTENT OUTPUT (these members also occur in the PCB)
/ctime          tmExpire;       //serialized expiry date value

//RUN-TIME OUTPUT (these members do NOT occur in the PCB)
HKEY            hkey;           //open registry handle for a program's key
Int             selection;      //user selected action value; one of the TLA_*values
PCB*            pcb;            //allocated PCB as loaded from .EXE file
```

300

FIG. 3

WO 99/66
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PCT/CA99/00560

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T092TT*25667260

Program Control block (PCB)
//same members as LockDef, except
//for each CString member we have a static UINT array
//only the indicated members of LockDef are duplicated in the PCB
//the members are NOT included in the same order

400

FIG. 4

Registry Control Record (RCR)
//this type contains all LockDef members designated
//or the registry, it also includes:
OFFSET offPCB; //previously found offset of PCB in the .EXE file

402

404

Time Lock Type (TLT) constants for LockDef. type

```
//INPUT
#define TLT_FIXED_DATE      0x0001   //Program expires on a fixed date
#define TLT_TIME_PERIOD     0x0002   //Program expires after a fixed period, after first execution
#define TLT_NO_ACTION       0x0004   //on expiry do not take action;return action value(s);debugging only
#define TLT_ACTIVE_CREATE   0x0008   //after Baitware creation;automatically calls IsExpired();default;off
//OUTPUT
#define TLT_EXPIRED         0x8000   //indicates the expiry date has been reached
```

406

Time Lock Action (TLA) constants for LockDef.action

```
#define TLA_HELP        0x0001   //make a help button available
#define TLA_CONTINUE    0x0002   //if this flag is on, a continue button is available
#define TLA_CONNECT     0x0004   //make a connect button available
#define TLA_QUIT        0x0008   //defined to complete return-value set
#define TLA_REMAINING   0x0010   //always display dialog w/ remaining days to expiry
#define TLA_GRACE       0x0020   //allow execution for LockDef.graceDays days after expiry
```

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MEMBER		*INPUT*	*OUTPUT*	*PCB*	*RCR(1)*
UEI	idProg	REQUIRED	NO	YES	YES
BITMASK	type	REQUIRED	NO	YES	NO
CTimeSpan	period	REQUIRED	NO	YES	NO
CTime	date	REQUIRED	NO	YES	NO
UINT	hid	REQUIRED(2)	NO	YES	NO
CString	url	REQUIRED(3)	NO	YES	NO
CString	regKey	OPTIONAL	YES	YES	NO
CString	progName	OPTIONAL	YES	YES	YES
CString	company	OPTIONAL	YES	YES	YES
UINT*	hexKey	OPTIONAL	YES	NO	NO
Ctime	tmExpire	NO	YES	YES	YES
HKEY	hkey	NO	YES	NO	NO
int	selection	NO	YES	NO	NO
PCB*	pcb	NO	YES	NO	NO

FIG. 5

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Program	*Registry Key Variable*	*Actual Registry Key Name*	*Registry Key Values*	*Data Burned-In Program*
<app><ver>.exe	RKeyArchive	<val. passed by Archive>	RCR	PCB
setup.exe	RKeySetup	<value passed by Setup>	RCR	PCB
<app>.exe	RKeyApp	<value passed by App>	RCR	PCB

FIG. 6

TOSETT.256E250

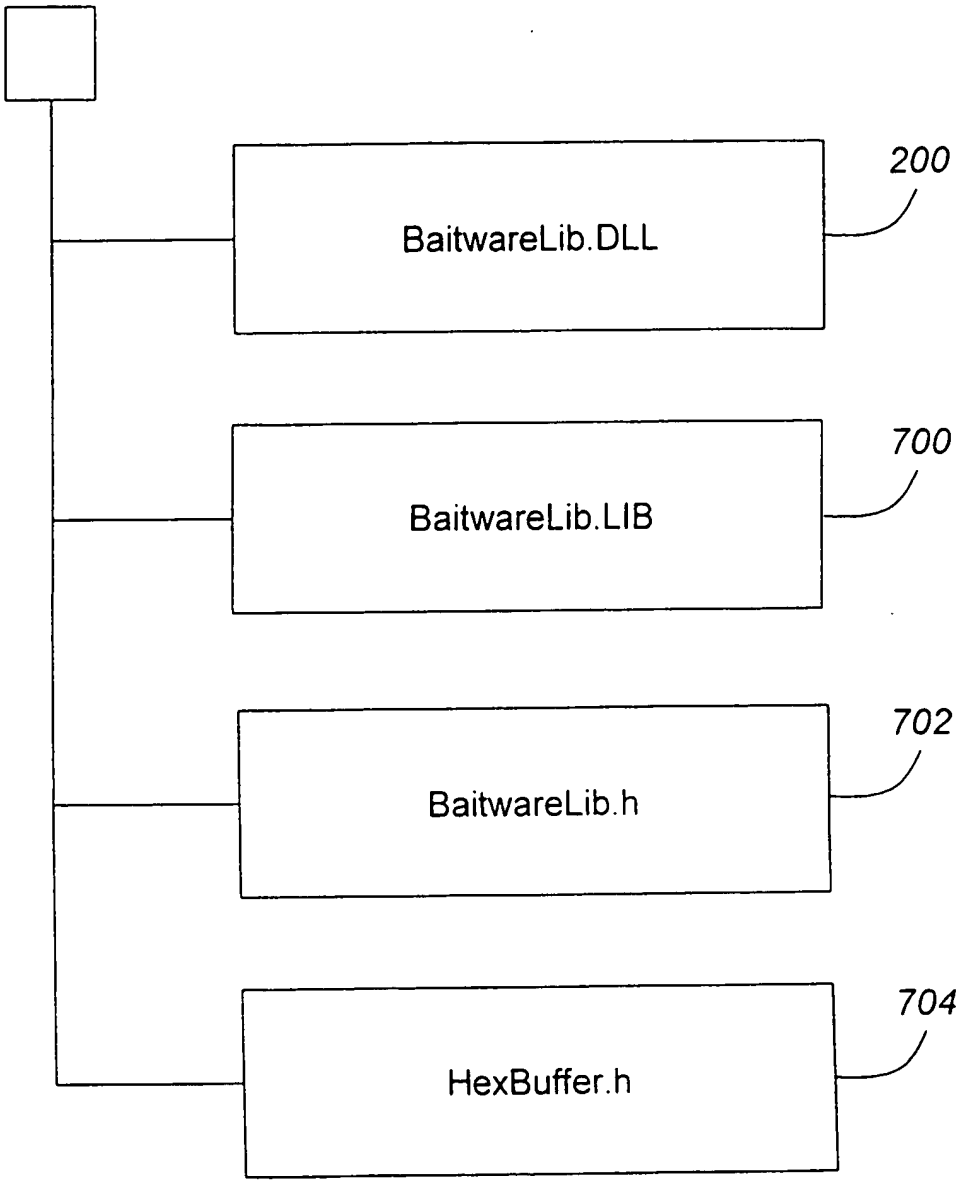

FIG. 7

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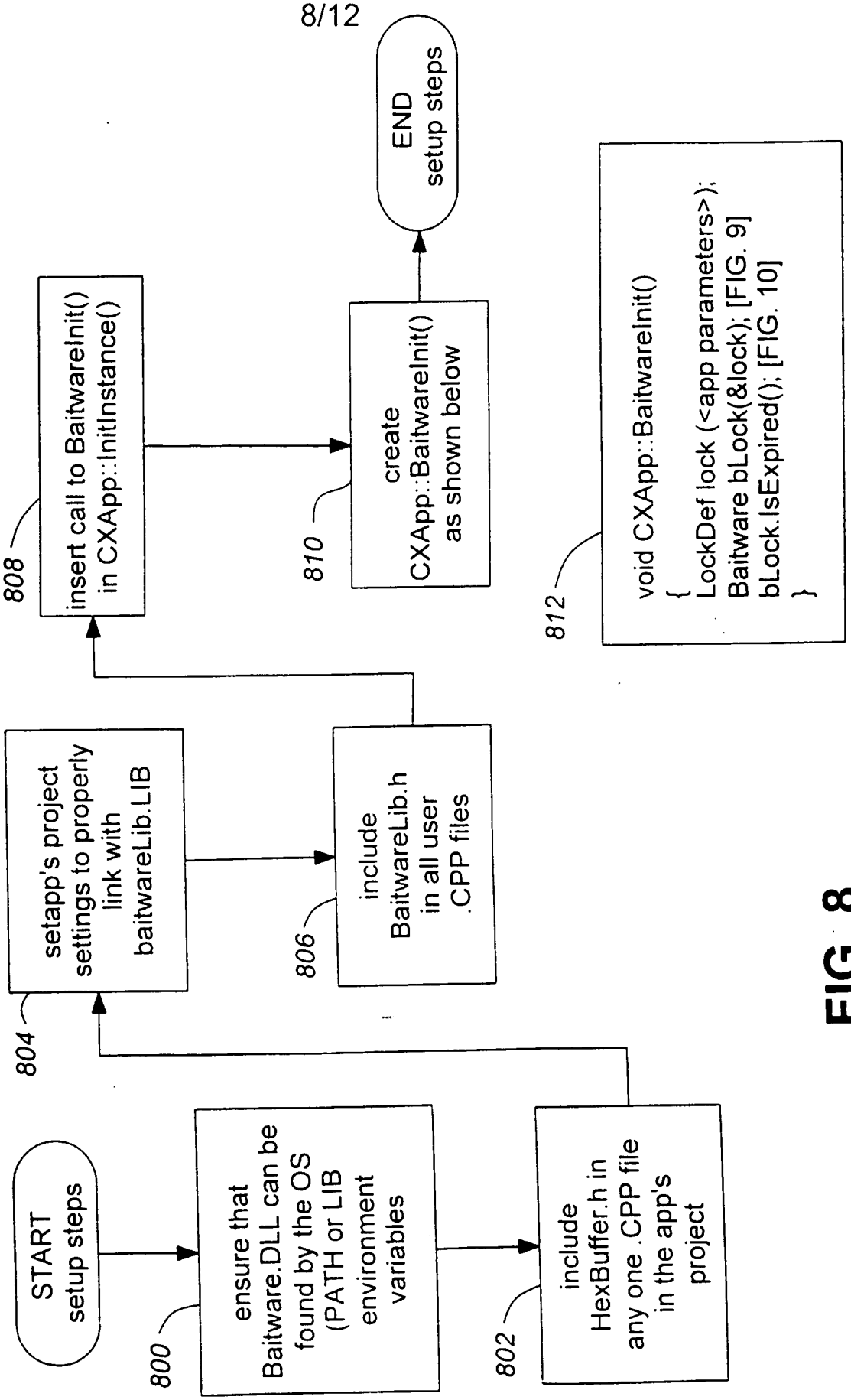
START
setup steps
ensure that Baitware.DLL can be found by the OS (PATH or LIB environment variables
include HexBuffer.h in any one .CPP file in the app's project
800
802
setapp's project settings to properly link with baitwareLib.LIB
include BaitwareLib.h in all user .CPP files
804
806
insert call to BaitwareInit() in CXApp::InitInstance()
create CXApp::BaitwareInit() as shown below
END
setup steps
808
810
void CXApp::BaitwareInit()
{
LockDef lock (<app parameters>);
Baitware bLock(&lock); [FIG. 9]
bLock.IsExpired(); [FIG. 10]
}
812

FIG. 8

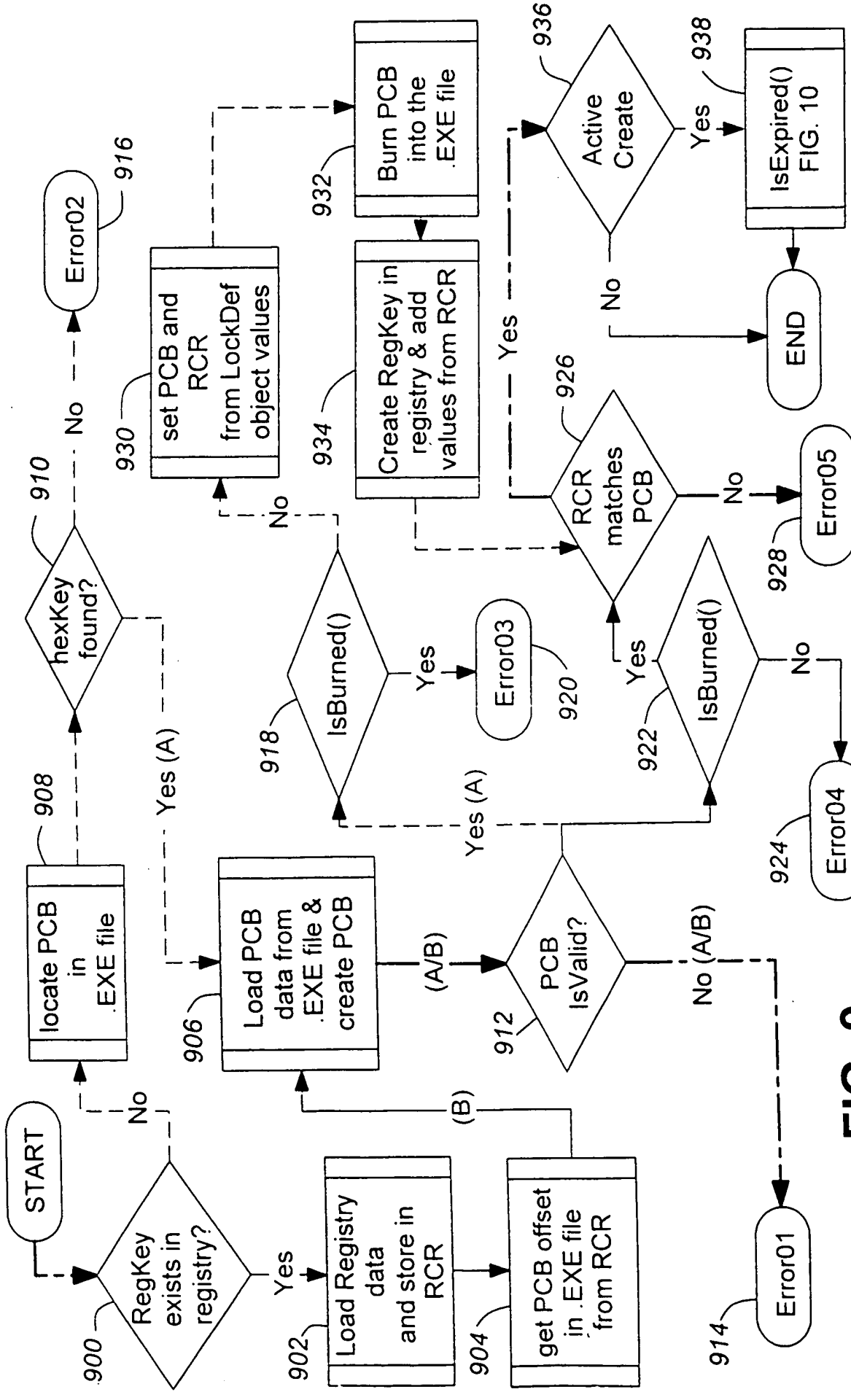
START
RegKey exists in registry?
900
Yes
Load Registry data and store in RCR
902
get PCB offset in .EXE file from RCR
904
No
(B)
locate PCB in .EXE file
908
Load PCB data from .EXE file & create PCB
906
(A/B)
PCB IsValid?
912
No (A/B)
Error01
914
Yes (A)
hexKey found?
910
No
Error02
916
IsBurned()
918
Yes
Error03
920
No
set PCB and RCR from LockDef object values
930
Burn PCB into the .EXE file
932
Create RegKey in registry & add values from RCR
934
IsBurned()
922
Yes
Error04
924
No
RCR matches PCB
926
Yes
Error05
928
No
Active Create
936
Yes
IsExpired() FIG. 10
938
No
END

FIG. 9

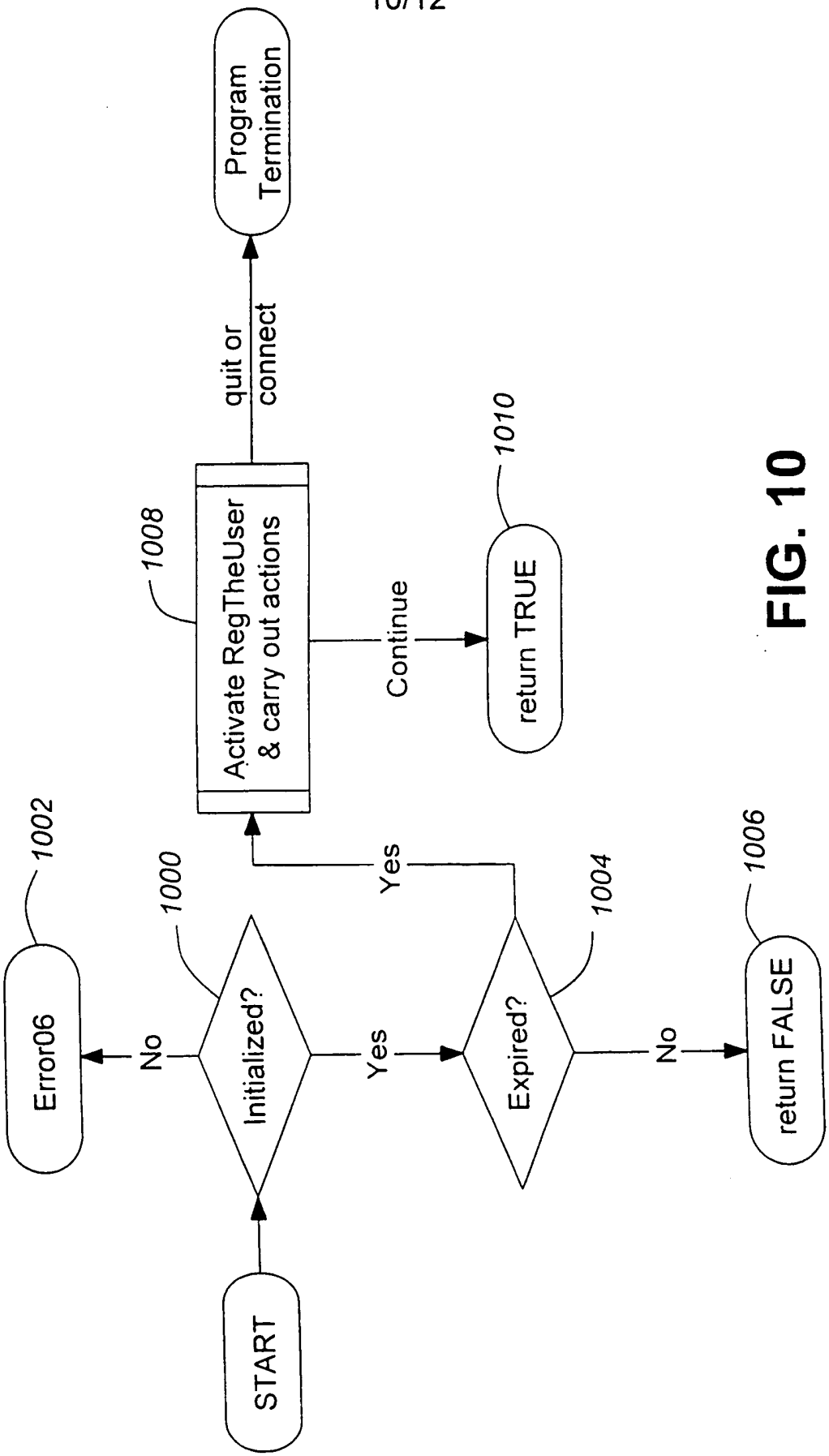
START
Initialized?
1000
No
Error06
1002
Yes
Expired?
1004
No
return FALSE
1006
Yes
Activate RegTheUser & carry out actions
1008
Continue
return TRUE
1010
quit or connect
Program Termination

FIG. 10

T092TT* 25667760

No.	Description of Condition	Possible Cause(s)
01	The program's PCB is invalid	A
02	Hex key not found in .EXE file	A
03	There was no registry key found, but the .EXE file was burned-in	B,C
04	Registry key(s) exist, but the .EXE file is not burned-in	D,C
05	The program's PCB does match the RCR in the registry	B,C,D
06	IsExpired called but Baitware is not initialized	E

1100

Cause-ID	Possible Cause of Condition
A	.EXE file for program is invalid or corrupted
B	Registry tampering by user
C	Partially completed uninstall or re-install
D	User previously saved .EXE file and has now copied over installed version
E	Programmer error; the program using Baitware is not initializing the object properly

1102

FIG. 11

WO 99/68
09/719957
PCT/CA99/00560

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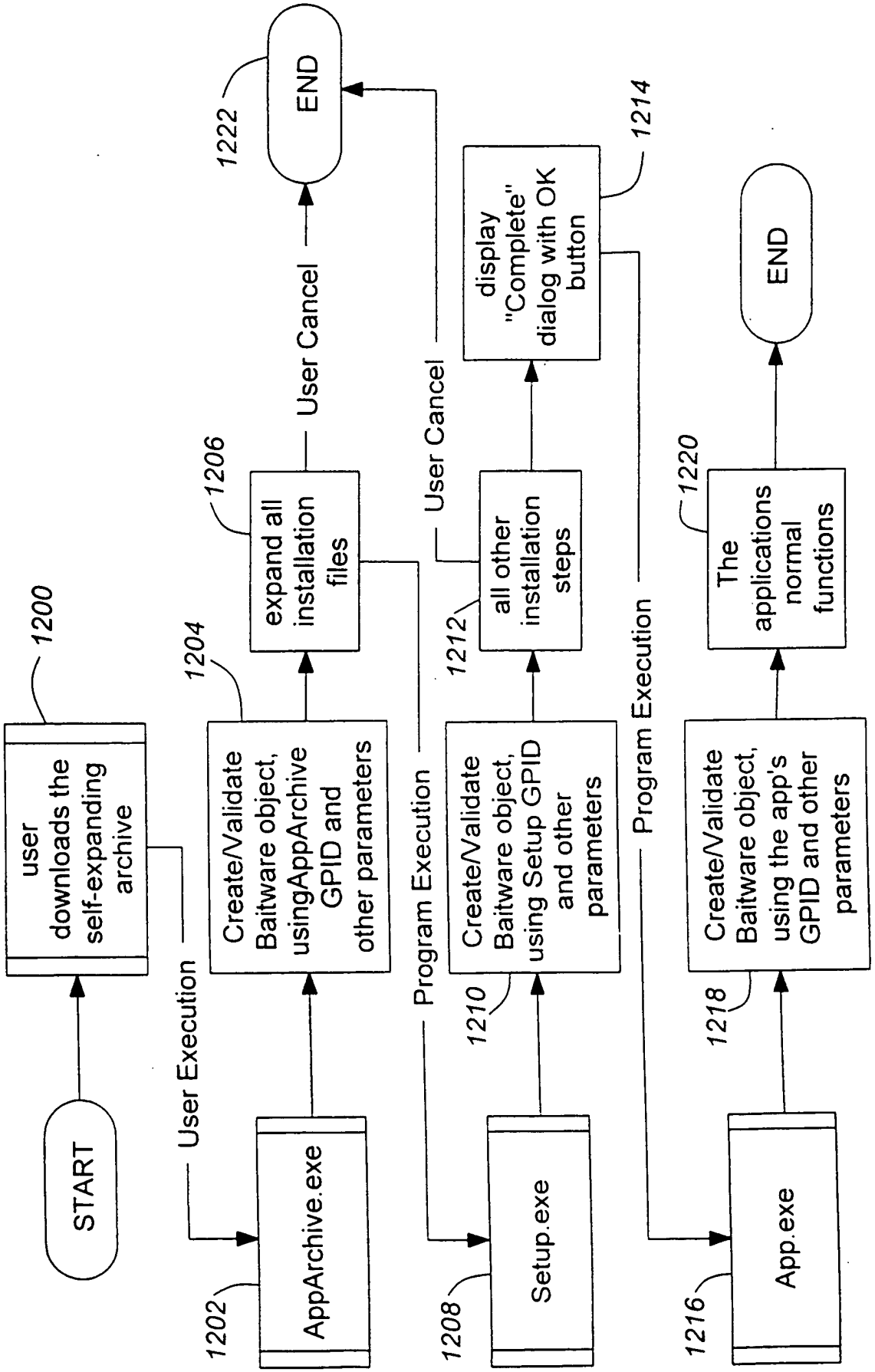
START
user downloads the self-expanding archive
1200
AppArchive.exe
1202
User Execution
Create/Validate Baitware object, usingAppArchive GPID and other parameters
1204
expand all installation files
1206
User Cancel
END
1222
Program Execution
Setup.exe
1208
Create/Validate Baitware object, using Setup GPID and other parameters
1210
all other installation steps
1212
User Cancel
display "Complete" dialog with OK button
1214
Program Execution
App.exe
1216
Create/Validate Baitware object, using the app's GPID and other parameters
1218
The applications normal functions
1220
END

FIG. 12